



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,221	05/07/2004	Kensuke Morita	200308756-02 (1509-498)	2021

7590 09/26/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

ROSEN, NICHOLAS D

ART UNIT	PAPER NUMBER
----------	--------------

3625

MAIL DATE	DELIVERY MODE
-----------	---------------

09/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/840,221	MORITA ET AL.	
	Examiner	Art Unit	
	Nicholas D. Rosen	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-17 have been examined.

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (page 2, line 2). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Alternatively, Applicant may prefer to deactivate the hyperlink by writing it out as, "http colon doubleslash www period nua period or period jp slash keywords slash" etc.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "computer program product" may be interpreted as pure software, as opposed to a physical embodiment of a computer program, and therefore as not being a process, machine, manufacture, or composition of matter, and so not patentable.

Claims 16 and 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "data structure" recited in each of claims 16 and 17 is an abstraction rather than a process, machine,

manufacture, or composition of matter, and so not patentable. This is addressed in the MPEP, 2106.01, which quotes the New IEEE Standard Dictionary of Electrical and Electronics Terms (5th ed., 1993), defining a "data structure" as "a physical or logical relationship among data elements, designed to support specific data manipulation functions." A relationship, as such, is not statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 5 recites that the component arrangement information and the component diagram data are independent of each other, which is asserted as preferable on page 5 of the specification (the third and fourth lines, which are labeled lines 4 and 5). However, on page 4 of the specification (lines 19-26), it is taught that a computer receives component arrangement information that specifies the arrangement of components on the drawing, and the processor "generates drawing information of the system as a bitmap object memory based on the received component arrangement information and the component diagram data." Based on this, and the described

invention in general, it is not clear how the component arrangement information and the component diagram data could be independent of each other, or how to make or use the invention so that they were. At a minimum, clarification is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Lines 3-6 of claim 1 are unclear in that it is not readily apparent whether "estimate" is a noun or a verb, and whether a diagram, as such, is functional to draw drawings, which appears to be odd terminology; also, it is unclear whether the terminal is adapted to be responsive to the component arrangement information only, or also to the estimate information and drawing-functional component diagram. Lines 10-11 pose further difficulty, because a database can store a diagram, but it is unclear how the database would store a diagram program package, if that is what it is, that draws drawings of components. In lines 20-21, the "drawing-purpose component diagram" technically lacks antecedent basis, since it is not necessarily the same as the "drawing-functional component diagram," and the question of what is stored in the diagram database again arises.

Art Unit: 3625

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook et al. (U.S. Patent Application Publication 2003/0172003) in view of official notice ****. Holbrook discloses a system for forming a drawing of a system having a plurality of components that are to be combined, comprising: a merchandise information provider terminal adapted to be responsive to component arrangement information used to arrange the components on the drawing, estimate information used to calculate prices of the components (Abstract; paragraphs 5, 25, and 37), and a drawing-functional component diagram used to draw drawings of the components (Abstract; paragraphs 5-

Art Unit: 3625

7, 25-33, 36, 37, 43, and 50; Figures 1 and 2; Appendix A, pages 8 and 9); a component arrangement information and estimate database for storing the component arrangement information and the estimate information adapted to be entered at the terminal (Abstract; paragraphs 5-7, 32, 33, and 37); and a diagram database for storing the component diagram data (paragraph 37); a Web and application server for receiving a request and a condition, which are used to form the drawing, and for forming the drawing (paragraphs 32 and 33; Figure 1). Holbrook does not expressly disclose a database server distinct from the Web and application server such that the Web and application server receives component arrangement information corresponding to the received condition from the database server, but official notice is taken that database servers are known, and Holbrook discloses that the invention can be practiced in distributed computing environments (paragraph 29). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include a database server for transmitting information, for the obvious advantage of coordinating information stored at multiple remote processing devices, as disclosed by Holbrook.

Holbrook discloses the Web and application server forming the drawing of the system in which components are to be combined, based on received component arrangement information and a selection of components and their relationships to each other (*ibid.*, as above).

Claims 2-8, 12, 14, and 15

Claims 2, 3, 5, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook et al. (U.S. Patent Application Publication 2003/0172003) in view of the Microsoft Press Computer Dictionary. As per claim 2, Holbrook discloses a method of forming a drawing of a system in which a plurality of components are combined based on component diagram data having drawings of the respective components, the method being performed with a computer, the method comprising: receiving component arrangement information including an arrangement of the components on the drawing (paragraphs 5-7, 25-33, 36, and 37; Figures 1 and 2); generating, by using the processor (see paragraph 29 for processor), drawing information of the system based on the received component information and the component diagram data (Abstract; Figures 8A, 8B, and 12; paragraphs 36, 37, 43, and 50; Appendix A, pages 8 and 9). Holbrook does not disclose generating the drawing information as a bitmap object, but bitmap objects are well known, as taught, for example, by the Microsoft Press Computer Dictionary (page 53, definition of bit map, bitmapped font, and bitmapped graphics). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to generate the drawing information as a bitmap object, for at least the obvious advantage of being able to transmit it as computer data so as to enable the user to look at the drawing on his client computer.

Holbrook does not expressly disclose that there is a volatile memory, or that the bitmap object is stored in the volatile memory, but volatile memory is well known, as taught, for example, by the Microsoft Press Computer Dictionary (page 502, definition of

volatile memory). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to store the bitmap object in the volatile memory, for such obvious advantages as temporarily storing data to be transmitted in reusable memory immediately before and during transmission to the user's client computer.

As per claim 3, displaying drawings, etc. to the user, the user being at a client computer remote from the server (e.g., Abstract; Figure 1; paragraphs 5-7, 29, 33, 36, 43, and 50) requires transmitting the bitmap (or other drawing) object to the user.

As per claim 5, Holbrook discloses component diagram data for prefabricated components (paragraphs 24, 26, 36, and 37), and a user choosing component arrangement information not dictated by the component diagram data, inasmuch as different components can be selected, and arranged in different ways (Abstract; paragraphs 36 and 37). In this sense, the component arrangement information and component diagram data may be described as independent of each other.

As per claim 12, claim 12 recites a drawing as formed by the method of claims 2 and 3, and is therefore obvious on the same grounds set forth above.

(Claim 12 would be unpatentable in any event, because system drawings are known, and the content of printed matter will not distinguish the claimed product from the prior art. See *In re Ngai*, 367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004).)

As per claim 14, claim 14 recites a computer program product for causing a computer to perform the method of claim 2, and **as per claim 15**, claim 15 additionally

recites causing the computer to perform the step of claim 3. Holbrook discloses programs for causing the server of his system to perform its functions (e.g., Abstract; paragraph 33). Hence, claims 14 and 15 are obvious on the same grounds set forth above.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook and the Microsoft Press Computer Dictionary as applied to claim 3 above, and further in view of official notice. Holbrook does not disclose that transmitting the bitmap object includes transmitting the bitmap object by streaming, but official notice is taken that transmitting objects by streaming is well known; hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to transmit the bitmap object by streaming, for at least the obvious advantage of enabling users to begin viewing and accessing the object before it has been completely transmitted.

Claims 6, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook and the Microsoft Press Computer Dictionary as applied to claim 2 above, and further in view of official notice. As per claim 6, Holbrook discloses that the component arrangement information includes the coordinates of a component (Abstract; paragraphs 25 and 26). Holbrook does not expressly disclose that the component arrangement information includes the size of the drawing, the scale of the drawing, an image frame, and a dimensional line, but official notice is taken that these are well known features of images. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the component

Art Unit: 3625

arrangement information to include the size of the drawing, for at least the obvious advantage of providing a drawing of the proper size to make features readily visible, to fit on the display of a client device, etc.; the scale of the drawing, for at least the obvious advantage of aiding the user in judging the real-world size of the features shown; an image frame, for at least the obvious advantage of presenting at least one image in a series; and a dimensional line, for at least the obvious advantage of judging the size of objects in the drawing by comparison to the dimensional line.

As per claim 7, Holbrook does not expressly disclose forming drawing information of the system as a drawing file, but official notice is taken that it is well known for sets of data that are manipulated and transmitted in computer systems to be formed as files. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to form drawing information of the system as a drawing file, for such obvious advantages as being readily able to manipulate, store, and identify the drawing information, and save it for further work or transmission to third parties.

As per claim 8, Holbrook does not expressly disclose that the drawing information of the system is a perspective view, but official notice is taken that it has been well known at least since the Renaissance to display drawings in perspective views, and in particular, that it is well known for computers to display objects or groups of objects in perspective view (Figures 8A and 8B) of Holbrook appear to qualify). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the drawing information of the system to be a perspective

Art Unit: 3625

view, for the obvious advantage of enabling users to see the arrangement as it would appear from a particular point.

Claims 9-11, 13, 16, and 17

Claims 9, 10, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook et al. (U.S. Patent Application Publication 2003/0172003) in view of the Microsoft Press Computer Dictionary. Claim 9 recites a number of the same elements as claim 2, and these are rejected on the same grounds set forth above for claim 2. Claim 9 additionally recites generating, by using the processor, estimate information of the system based on the received component arrangement information and price data. Holbrook additionally discloses generating estimate information of the system based on the received component arrangement information and price data (e.g., Abstract; paragraphs 5, 25, and 37). Holbrook does not expressly disclose forming a written estimate, but even taking this to be a limitation of claim 9, despite the word "written" appearing only in the preamble, without any explicit step of writing in the body of the claim, Holbrook discloses the client computers having printers as output devices (paragraph 31), which would enable reports provided to users (as per paragraph 25) to be printed. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to form a written estimate, for the obvious advantage of maintaining hardcopy documentation for ready consultation away from the computer.

As per claim 10, Holbrook discloses providing a report including total cost (paragraph 25), which implies transmitting the estimate information. For the transmission of the bitmap object, the rejection of claim 3 above applies.

As per claim 13, claim 13 recites a drawing as formed by the method of claims 9 and 10, and is therefore obvious on the same grounds set forth above.

(Claim 13 would be unpatentable in any event, because written estimates are known, and the content of printed matter will not distinguish the claimed product from the prior art. See *In re Ngai*, 367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004).)

As per claims 16 and 17, Holbrook and the Microsoft Press Computer Dictionary make obvious providing drawing information and cost estimate information in a computer system, as set forth above; therefore the data structure used to display the written estimate on a terminal apparatus is likewise obvious, for the obvious advantage of causing the estimate to be displayed and thus made available.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook and the Microsoft Press Computer Dictionary as applied to claim 9 above, and further in view of official notice. Holbrook does not expressly disclose storing the generated estimate information and an identification number that specifies said estimate information, whereby the written information can be retrieved, but official notice is taken that it is well known to save information and an identification number or name specifying the saved information, whereby the information can be retrieved. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of

applicant's invention to store the generated estimate information and an identification number that specifies said estimate information, whereby the written information can be retrieved, for the obvious advantage of being able to find and retrieve the generated estimate information, should a user wish to return to a previously designed system of components.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Krause et al. (U.S. Patent 5,625,827) disclose a method and system of blueprint document manipulation. Chuang et al. (U.S. Patent 6,795,746) disclose a system for providing an IC bonding diagram via network. Curran et al. (U.S. Patent 6,898,580) disclose a single board computer quotation and design system and method. Gillig (U.S. Patent 6,993,708) disclose a system for automated generation and assembly of specification documents in CADD environments. Jung (U.S. Patent 6,996,503) discloses a system and method for take-off of materials using a two-dimensional CAD interface. Iwamura (U.S. Patent 7,080,096) disclose a housing space-related commodity sale assisting system.

Smith (U.S. Patent Application Publication 2002/0035408) discloses a system and process for client-driven automated computer-aided drafting. Sunshine et al. (U.S. Patent Application Publication 2004/0134237) disclose an integrated laundry center (note especially paragraph 28).

Fiegl (WO 01/50389A2) discloses a system and method for preparing quotes and entering. Nanaumi (JP 2001209669 A) discloses a house design supporting device, method, and recording medium. Emori et al. (EP 1 357 484 A1) disclose a method of preparing an estimate for sheet metal working.

The anonymous article, "Cost Databases Forge Links to Software Programs; Access to Electronic Databases Provide Automatic Cost Feedback on CADD Designs," discloses automatically calculating construction estimates from CADD drawings. Hatley ("Easy Way to Grasp the Big Picture; Software") discloses letting people create their own virtual kitchens using a database of more than 500 objects. Charles ("In the Region/Connecticut; Blueprints, Models? A Virtual Image Does the Trick") discloses virtual houses with images of a variety of layouts and custom options. The anonymous article, "Virtual Kitchen, Bath Design," discloses allowing users to make decorating decisions by mixing and matching thousands of appliances, furnishings, etc.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas D. Rosen, whose telephone number is 571-272-6762. The examiner can normally be reached on 8:30 AM - 5:00 PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith, can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Non-official/draft communications can be faxed to the examiner at 571-273-6762.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3625

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas D. Rosen

NICHOLAS D. ROSEN
PRIMARY EXAMINER

September 24, 2007